

### AMENDMENTS TO THE SPECIFICATION

Please replace the existing paragraph at page 27, line 21, which currently reads:

**Figs. 3g, 3h, 3i, 3j, 6c, 7d, 8b, and 8c** are flow diagrams.

with the following two paragraphs.

**Figs. 3g, 6c, 7d, 8b, and 8c** are flow diagrams.

**Figs. 3h, 3i, and 3j** are program pseudocode.

Kindly replace the Abstract with the following:

A computer binary translator translates at least a segment of a binary representation of a program from a first instruction set architecture to a second instruction set architecture. A sequence of side-effects in the translation differs from a sequence of side-effects in the original. The translation distinguishes memory loads that are believed to be directed to well-behaved memory from memory loads that are believed to be directed to non-well-behaved memory device(s). Instruction execution circuitry identifies a memory reference that has a side-effect that has been reordered by translation, the memory reference having been believed at translation time to be directed to well-behaved memory but at execution it is found that the reference cannot be guaranteed to be well-behaved. The instruction execution circuitry identifies whether the difference in side-effect order may have a material effect on the execution of the program. A roll-back program state is established, and execution of the original code resumes.